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EXAMINER

CASCHERA, ANTONIO A

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |  |                                     |  |
|------------------------------|--|-------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>09/842,561   | <b>Applicant(s)</b><br>CHERI ET AL. |  |
|                              | <b>Examiner</b><br>Antonio A. Caschera | <b>Art Unit</b><br>2628             |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 September 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 18-24,26-31,33,34,39-41,44 and 45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-24,26-31,33,34,39-41,44 and 45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 18-20, 22-24, 27, 28, 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kraft et al. (U.S. Patent 6,463,278 B2) in view of Helms (U.S. Patent 5,952,992).

In reference to claim 18, Kraft et al. discloses telephone automatic mode selection method for implementation in a phone, connectable to both cellular and cordless networks), the phone comprising a normal user interface including a display and keypad (see column 4, lines 58-67 and column 5, lines 1-2). Note, the Office interprets the phone of Kraft et al. functionally equivalent to a "handheld computer" as Kraft et al. further discloses the phone comprising a CPU (see column 4, lines 58-63). Also, the phone of Kraft et al. is interpreted as inherently comprising, "a housing configured to be held in hand during use" since it is a telephone and further inherently comprises a front surface of the housing which supports the phone display, disclosed by Kraft et al. (see column 5, lines 1-2). One of ordinary skill in the art would surely agree with such interpretations made by the Office since telephones are widely utilized and available incorporating such limitations. Kraft et al. further discloses the CPU and coupled circuitry to handle cellular telephone specific functions (see column 5, lines 26-43) and therefore

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the Office interprets Kraft et al. to disclose the phone as comprising cellular telephone electronics. Kraft et al. also discloses the phone to use control parameters to operate a timer function for enabling a calendar function for entering of appointment data (see column 2, lines 15-21 and column 4, lines 35-57). Note, the Office interprets the CPU (computing electronics) to handle such calendar or PIM data functions since Kraft et al. discloses the CPU to handle the phone modes (see column 6, lines 7-24). Kraft et al. discloses the phone to further comprise of a light detector for detecting light conditions around the phone which are interpreted as being received by the computing electronics (i.e. CPU and coupled circuitry of the phone) (see column 5, lines 44-52). Although Kraft et al. discloses a single light detector, Kraft et al. does not explicitly disclose utilizing a plurality of light detectors. Helms discloses a method and apparatus for automatically adjusting the brightness of an LCD based upon ambient lighting conditions of the environment in which a laptop (handheld) computer is used (see column 2, lines 3-6, 8-18 and Figure 1). Helms discloses computing a weighted average of measured signals obtained by photodetectors (one on the front surface and another on the back surface of the display lid, see Figure 4) and using the computed average to index a lookup table (see columns 4-5, lines 66-2). Note, the Office interprets the weighted average of Helms functionally equivalent to Applicant's conditioned signal as the weighted average is based upon the average values of detected light measurements via the photodetectors. Again, this is seen as functionally equivalent to Applicant's description of the "conditioned signal" (see paragraph 23). Lastly, Helms further discloses an embodiment of the invention wherein the greater AL signal of the two photodetectors is utilized in indexing the lookup table (see columns 4-5, lines 52-2), which the Office interprets as ignoring a signal from one of the photodetectors when indexing the lookup

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table or generating the "conditioned signal." It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the automatic brightness controlling techniques of Helms with the phone system of Kraft et al. in order to provide the computing electronics with a better representation of ambient light levels directed towards the device by supplying the electronics with multiple samples derived from the multiple sensors, thus the multiple samples providing more light detection at or around the device than using only one reading from one sensor. Such is particularly useful in situations in which light is directed towards the back of the LCD, hence toward the user's eyes, which light, while affecting the visibility of the LCD, might not be detected by the first photodetector (see column 2, lines 32-36 of Helms).

In reference to claims 19 and 20, Kraft et al. and Helms disclose all of the claim limitations as applied to claim 18 above in addition, Helms discloses utilizing signals from one or both of the photodetectors located on the front and back surface of the display lid, to adjust the brightness level of the LCD (see columns 4-5, lines 52-2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the automatic brightness controlling techniques of Helms with the phone system of Kraft et al. in order to provide the computing electronics with a better representation of ambient light levels directed towards the device by supplying the electronics with multiple samples derived from the multiple sensors, thus the multiple samples providing more light detection at or around the device than using only one reading from one sensor. Such is particularly useful in situations in which light is directed towards the back of the LCD, hence toward the user's eyes, which light, while affecting the

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visibility of the LCD, might not be detected by the first photodetector (see column 2, lines 32-36 of Helms).

In reference to claim 22, Kraft et al. and Helms disclose all of the claim limitations as applied to claim 18 above. Kraft et al. explicitly discloses the phone to use control parameters to operate a timer function for enabling a calendar function for entering of appointment data (see column 2, lines 15-21 and column 4, lines 35-57). Note, the Office interprets the CPU (computing electronics) to handle such calendar or PIM data functions since Kraft et al. discloses the CPU to handle the phone modes (see column 6, lines 7-24). Further, the Office interprets the “contact” limitation of Applicant’s claim to inherently be comprised with the phone device and user interface disclosed by Kraft et al. since such feature, having a list of saved dialed phone numbers is inherent to telephone devices. Lastly, Helms discloses a performing the brightness processing techniques upon a laptop which is seen to inherently comprise of contact and calendar applications.

In reference to claim 23, Kraft et al. and Helms disclose all of the claim limitations as applied to claim 22 above. Helms discloses performing the brightness processing techniques upon a laptop which is seen to inherently comprise of such word processing, spreadsheets and calculator applications.

In reference to claim 24, Kraft et al. and Helms disclose all of the claim limitations as applied to claim 18. Helms discloses a method and apparatus for automatically adjusting the brightness of an LCD based upon ambient lighting conditions of the environment in which a laptop (handheld) computer is used (see column 2, lines 3-6, 8-18 and Figure 1). Helms discloses computing a weighted average of measured signals obtained by photodetectors (one on

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the front surface and another on the back surface of the display lid, see Figure 4) and using the computed average to index a lookup table (see columns 4-5, lines 66-2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the automatic brightness controlling techniques of Helms with the phone system of Kraft et al. in order to provide the computing electronics with a better representation of ambient light levels directed towards the device by supplying the electronics with multiple samples derived from the multiple sensors, thus the multiple samples providing more light detection at or around the device than using only one reading from one sensor. Such is particularly useful in situations in which light is directed towards the back of the LCD, hence toward the user's eyes, which light, while affecting the visibility of the LCD, might not be detected by the first photodetector (see column 2, lines 32-36 of Helms).

In reference to claim 27, Kraft et al. and Helms disclose all of the claim limitations as applied to claim 18 above. Although Helms does disclose performing the brightness processing techniques upon a laptop, neither Kraft et al. nor Helms explicitly disclose the handheld computer configured to comprise of a touch screen display however, at the time the invention was made, it would have been obvious to one of ordinary skill in the art to the implement a multitude of different types of displays (i.e. LCD of various pixel sizes, TFT, character matrix LCD etc.) in the phone device of Kraft et al.. Applicant has not disclosed that specifically providing such explicit type of display, touch screen display, provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the display included in the phone device of Kraft et al. or LCD of Helms, because the exact type of display included in a

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phone/laptop device is seen as a matter decided upon by the inventor and to which best suits the application at hand. Furthermore, the Office sees such a limitation as providing no immediate criticality to the invention at hand since the real scope of the invention is seemed to be directed to use of light sensors on a handheld device to adjust brightness/other parameters of the device and because the implementation of a touch screen display in a phone/laptop device would not affect the operation, as per the scope of the claims, of the device as a whole in view of the sensing of light via such light sensors. Therefore, it would have been obvious to one of ordinary skill in this art to modify the combination of Kraft et al. and Helms to obtain the invention as specified in claim 27.

In reference to claim 28, Kraft et al. and Helms disclose all of the claim limitations as applied to claim 18 above. Helms discloses computing a weighted average of measured signals obtained by photodetectors (one on the front surface and another on the back surface of the display lid, see Figure 4) and using the computed average to index a lookup table (see columns 4-5, lines 66-2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the automatic brightness controlling techniques of Helms with the phone system of Kraft et al. in order to provide the computing electronics with a better representation of ambient light levels directed towards the device by supplying the electronics with multiple samples derived from the multiple sensors, thus the multiple samples providing more light detection at or around the device than using only one reading from one sensor. Such is particularly useful in situations in which light is directed towards the back of the LCD, hence toward the user's eyes, which light, while affecting the visibility of the LCD, might not be detected by the first photodetector (see column 2, lines 32-36 of Helms).



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In reference to claims 40 and 41, Kraft et al. and Helms disclose all of the claim limitations as applied to claim 18 above. Although both Kraft et al. and Helms disclose light sensors provided on a front surface of a device housing, neither explicitly disclose the plurality of light sensors provided on the same surface of the housing. At the time the invention was made, it would have been obvious to one of ordinary skill in the art to mount multiple light sensors on the same surface of a device, utilizing the photodetector measurement/averaging techniques of Helms to obtain a more accurate reading of light affecting the viewability of the device because as is well known in the art of computer processing, many data samples provides more detail than a single sample (Official Notice). Therefore, providing many photodetector measurements as opposed to one measurement, would provide a more accurate reading of surrounding light thereby leading to a more enjoyable display of data from the device.

2. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kraft et al. (U.S. Patent 6,463,278 B2), Helms (U.S. Patent 5,952,992) and further in view of Alderman et al. (U.S. Patent 5,828,056).

In reference to claim 39, Kraft et al. and Helms disclose all of the claim limitations as applied to claim 18 above. Although Helms discloses ignoring signals from one of the photodetectors located on the front or back surface of the display lid, to adjust the brightness level of the LCD (see columns 4-5, lines 52-2), neither Kraft et al. nor Helms explicitly disclose the ignored signal being identified as aberrant. Alderman et al. discloses a photodetector system that is able to discriminate between different types of light (see column 1, lines 7-13). Alderman et al. explicitly discloses the photodetector utilized in capturing reflected light whereby multiple beams of light are captured with the invention capable of ignoring spurious high signals that are

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abnormalities in the system (see column 3, lines 16-51). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the abnormal light beam detection theory of Alderman et al. with the automatic brightness controlling techniques of Helms and the phone system of Kraft et al. in order set in place, an "error-checking" test of ambient light signals wherein abnormal or out-of-normal-range signals are not factored in when setting display characteristics which would ultimately lead to a more precise and viewer friendly display system.

3. Claims 21, 26, 29-31, 33, 34, 44 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kraft et al. (U.S. Patent 6,463,278 B2), Helms (U.S. Patent 5,952,992) and further in view of Dutta (U.S. Pub 2002/0163524).

In reference to claim 21, Kraft et al. and Helms disclose all of the claim limitations as applied to claim 19 above. Although Helms discloses utilizing signals from one or both of the photodetectors located on the front and back surface of the display lid, to adjust the brightness level of the LCD (see columns 4-5, lines 52-2), neither Kraft et al. nor Helms explicitly disclose adjusting one other characteristic of the handheld computer based on the signals from at least one light sensor. Dutta discloses a PDA comprising a housing (see large rectangle of Figure 1) and a display, having a front surface, supported by the housing (#101 of Figure 1). Dutta also discloses hardware components located within the PDA, and thus supported by the housing, utilized to communicate with the display (see page 2, paragraph 24 and Figure 2). Dutta discloses the hardware components configured to adjust both backlight and contrast display values (see Figure 8). It would have been obvious to one of ordinary skill in the art to implement the contrast adjusting techniques of Dutta with the automatic brightness controlling techniques of

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Helms and the phone system of Kraft et al. in order to completely fine tune, via the modification of multiple display characteristics, the readability of text on a mobile/handheld display device particularly when environmental conditions are changing (see last 4 lines of paragraph 3 of Dutta).

In reference to claim 26, Kraft et al. and Helms disclose all of the claim limitations as applied to claim 18 above. Although Helms discloses utilizing signals from one or both of the photodetectors located on the front and back surface of the display lid, to adjust the brightness level of the LCD (see columns 4-5, lines 52-2), neither Kraft et al. nor Helms explicitly disclose the capability of adjusting the brightness behind input buttons. Dutta discloses a PDA comprising a housing (see large rectangle of Figure 1) and a display, having a front surface, supported by the housing (#101 of Figure 1). Dutta also discloses hardware components located within the PDA, and thus supported by the housing, utilized to communicate with the display (see page 2, paragraph 24 and Figure 2). Dutta discloses the hardware components configured to adjust both backlight and contrast display values (see Figure 8). Dutta also discloses the PDA to possibility comprise of a touchscreen and capable of adjusting brightness using the touchscreen (see paragraph 3). Further, the touchscreen of Dutta is seen as inherently comprising input buttons defined on the touchscreen and which are therefore also backlight adjustable with the display screen since they are apart of the display screen. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the touchscreen type display of Dutta with the automatic brightness signal controlling techniques of Helms and the phone system of Kraft et al. in order to provide adjustable the readability of text on a mobile/handheld display device particularly when environmental conditions are changing

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(see last 4 lines of paragraph 3 of Dutta). Further, although Dutta does inherently disclose input buttons, as part of the touchscreen display of the PDA, such input buttons are not explicitly disclosed as provided in fixed positions. At the time the invention was made, it would have been obvious to one of ordinary skill in the art to modify the touchscreen interface of Dutta to include touchscreen buttons that are provided at fixed positions (i.e. a power button, clock button) on the display. Applicant has not disclosed that specifically fixing such buttons on the display provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the inherent touchscreen interface buttons of Dutta because the inherent buttons of Dutta provide for a more customized interface of input buttons than fixed buttons. Providing fixed buttons does however provide an easy-to-access point of executing familiar commands on a system. Thus the exact positioning of buttons on an interface, relative to a display, is seen as a matter decided upon by the inventor and to which best suits the application at hand since a designer may believe to exclaim the design and look of the system over the ease of functionality or vice-versa. Therefore, it would have been obvious to one of ordinary skill in this art to modify combination of Kraft, Helmes and Dutta to obtain the invention as specified in claim 26.

In reference to claim 29, Kraft et al. discloses telephone automatic mode selection method for implementation in a phone, connectable to both cellular and cordless networks), the phone comprising a normal user interface including a display and keypad (see column 4, lines 58-67 and column 5, lines 1-2). Note, the Office interprets the phone of Kraft et al. functionally equivalent to a "handheld computer" as Kraft et al. further discloses the phone comprising a CPU (see column 4, lines 58-63). Also, the phone of Kraft et al. is interpreted as inherently

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comprising, “a housing configured to be held in hand during use” since it is a telephone and further inherently comprises a front surface of the housing which supports the phone display, disclosed by Kraft et al. (see column 5, lines 1-2). One of ordinary skill in the art would surely agree with such interpretations made by the Office since telephones are widely utilized and available incorporating such limitations. Kraft et al. further discloses the CPU and coupled circuitry to handle cellular telephone specific functions (see column 5, lines 26-43) and therefore the Office interprets Kraft et al. to disclose the phone as comprising cellular telephone electronics. Kraft et al. also discloses the phone to use control parameters to operate a timer function for enabling a calendar function for entering of appointment data (see column 2, lines 15-21 and column 4, lines 35-57). Note, the Office interprets the CPU (computing electronics) to handle such calendar or PIM data functions since Kraft et al. discloses the CPU to handle the phone modes (see column 6, lines 7-24) such phone modes including setting call divert services, light, sound volume, call alert and ringing volumes (see column 2, lines 57-60 and Table 1) which the Office further interprets equivalent to the “other applications” limitation of the claims since such modes must be executed and parameters selected and applied thereto via user operation. Further, the Office interprets the “contact” limitation of Applicant’s claim to inherently be comprised with the phone device and user interface disclosed by Kraft et al. since such feature, having a list of saved dialed phone numbers is inherent to telephone devices. Kraft et al. discloses the phone to further comprise of a light detector for detecting light conditions around the phone which are interpreted as being received by the computing electronics (i.e. CPU and coupled circuitry of the phone) (see column 5, lines 44-52). Although Kraft et al. discloses a single light detector, Kraft et al. does not explicitly disclose the light detector adjusting a characteristic of the handheld

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device. Helms discloses a method and apparatus for automatically adjusting the brightness of an LCD based upon ambient lighting conditions of the environment in which a laptop (handheld) computer is used (see column 2, lines 3-6, 8-18 and Figure 1). Helms discloses computing a weighted average of measured signals obtained by photodetectors (one on the front surface and another on the back surface of the display lid, see Figure 4) and using the computed average to index a lookup table (see columns 4-5, lines 66-2). Lastly, Helms further discloses an embodiment of the invention wherein the greater AL signal of the two photodetectors is utilized in indexing the lookup table (see columns 4-5, lines 52-2), which the Office interprets as ignoring a signal from one of the photodetectors when indexing the lookup table or generating the "conditioned signal." It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the automatic brightness controlling techniques of Helms with the phone system of Kraft et al. in order to provide the computing electronics with a better representation of ambient light levels directed towards the device by supplying the electronics with multiple samples derived from the multiple sensors, thus the multiple samples providing more light detection at or around the device than using only one reading from one sensor. Such is particularly useful in situations in which light is directed towards the back of the LCD, hence toward the user's eyes, which light, while affecting the visibility of the LCD, might not be detected by the first photodetector (see column 2, lines 32-36 of Helms). Although Helms discloses utilizing signals from one or both of the photodetectors located on the front and back surface of the display lid, to adjust the brightness level of the LCD (see columns 4-5, lines 52-2), neither Kraft et al. nor Helms explicitly disclose the capability of adjusting the brightness behind input buttons. Dutta discloses a PDA comprising a housing (see large rectangle of Figure 1) and

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a display, having a front surface, supported by the housing (#101 of Figure 1). Dutta also discloses hardware components located within the PDA, and thus supported by the housing, utilized to communicate with the display (see page 2, paragraph 24 and Figure 2). Dutta discloses the hardware components configured to adjust both backlight and contrast display values (see Figure 8). Dutta also discloses the PDA to possibility comprise of a touchscreen and capable of adjusting brightness using the touchscreen (see paragraph 3). Further, the touchscreen of Dutta is seen as inherently comprising input buttons defined on the touchscreen and which are therefore also backlight adjustable with the display screen since they are apart of the display screen. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the touchscreen type display of Dutta with the automatic brightness signal controlling techniques of Helms and the phone system of Kraft et al. in order to provide adjustable the readability of text on a mobile/handheld display device particularly when environmental conditions are changing (see last 4 lines of paragraph 3 of Dutta). Further, although Dutta does inherently disclose input buttons, as part of the touchscreen display of the PDA, such input buttons are not explicitly disclosed as provided in fixed positions. At the time the invention was made, it would have been obvious to one of ordinary skill in the art to modify the touchscreen interface of Dutta to include touchscreen buttons that are provided at fixed positions (i.e. a power button, clock button) on the display. Applicant has not disclosed that specifically fixing such buttons on the display provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the inherent touchscreen interface buttons of Dutta because the inherent buttons of Dutta provide for a more customized interface

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of input buttons than fixed buttons. Providing fixed buttons does however provide an easy-to-access point of executing familiar commands on a system. Thus the exact positioning of buttons on an interface, relative to a display, is seen as a matter decided upon by the inventor and to which best suits the application at hand since a designer may believe to exclaim the design and look of the system over the ease of functionality or vice-versa. Therefore, it would have been obvious to one of ordinary skill in this art to modify combination of Kraft, Helms and Dutta to obtain the invention as specified in claim 29.

In reference to claim 30, Kraft et al., Helms and Dutta disclose all of the claim limitations as applied to claim 29 above in addition, Helms discloses utilizing signals from one or both of the photodetectors located on the front and back surface of the display lid, to adjust the brightness level of the LCD (see columns 4-5, lines 52-2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the automatic brightness controlling techniques of Helms with the phone system of Kraft et al. in order to provide the computing electronics with a better representation of ambient light levels directed towards the device by supplying the electronics with multiple samples derived from the multiple sensors, thus the multiple samples providing more light detection at or around the device than using only one reading from one sensor. Such is particularly useful in situations in which light is directed towards the back of the LCD, hence toward the user's eyes, which light, while affecting the visibility of the LCD, might not be detected by the first photodetector (see column 2, lines 32-36 of Helms).

In reference to claim 31, Kraft et al., Helms and Dutta disclose all of the claim limitations as applied to claim 30 above. Helms discloses computing a weighted average of measured



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signals obtained by photodetectors (one on the front surface and another on the back surface of the display lid, see Figure 4) and using the computed average to index a lookup table (see columns 4-5, lines 66-2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the automatic brightness controlling techniques of Helms with the phone system of Kraft et al. in order to provide the computing electronics with a better representation of ambient light levels directed towards the device by supplying the electronics with multiple samples derived from the multiple sensors, thus the multiple samples providing more light detection at or around the device than using only one reading from one sensor. Such is particularly useful in situations in which light is directed towards the back of the LCD, hence toward the user's eyes, which light, while affecting the visibility of the LCD, might not be detected by the first photodetector (see column 2, lines 32-36 of Helms).

In reference to claims 33 and 34, Kraft et al., Helms and Dutta disclose all of the claim limitations as applied to claim 29 above. Helms discloses a method and apparatus for automatically adjusting the brightness of an LCD based upon ambient lighting conditions of the environment in which a laptop (handheld) computer is used (see column 2, lines 3-6, 8-18 and Figure 1). Helms discloses computing a weighted average of measured signals obtained by photodetectors (one on the front surface and another on the back surface of the display lid, see Figure 4) and using the computed average to index a lookup table (see columns 4-5, lines 66-2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the automatic brightness controlling techniques of Helms with the phone system of Kraft et al. in order to provide the computing electronics with a better representation of ambient light levels directed towards the device by supplying the electronics with multiple samples

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derived from the multiple sensors, thus the multiple samples providing more light detection at or around the device than using only one reading from one sensor. Such is particularly useful in situations in which light is directed towards the back of the LCD, hence toward the user's eyes, which light, while affecting the visibility of the LCD, might not be detected by the first photodetector (see column 2, lines 32-36 of Helms).

In reference to claims 44 and 45, Kraft et al., Helms and Dutta disclose all of the claim limitations as applied to claim 32 above. Helms discloses computing a weighted average of measured signals obtained by photodetectors (one on the front surface and another on the back surface of the display lid, see Figure 4) and using the computed average to index a lookup table (see columns 4-5, lines 66-2). Note, the Office interprets the weighted average of Helms functionally equivalent to Applicant's conditioned signal as the weighted average is based upon the average values of detected light measurements via the photodetectors. Again, this is seen as functionally equivalent to Applicant's description of the "condoned signal" (see paragraph 23).

### ***Response to Arguments***

4. The Office notes the cancellation of claims 32, 36, 38, 42, 43 and 46.
5. Applicant's arguments of 09/02/08 indicate previously indicated allowable subject matter has been amended into the independent claims 18 and 29 (see page 6 of Applicant's Remarks). However, upon further review of the cited prior art, a new grounds of rejection is made in view of Kraft, Helms, Dutta and further in view of Alderman et al..

### ***Conclusion***

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Antonio Caschera whose telephone number is (571) 272-7781. The examiner can normally be reached Monday-Thursday and alternate Fridays between 7:00 AM and 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung, can be reached at (571) 272-7794.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

**571-273-8300 (Central Fax)**

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (571) 272-2600.

/Antonio A Caschera/

Examiner, Art Unit 2628

Temporary Full Signatory Authority

**9/17/08**